



FUSS & O'NEILL
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February 16, 2007

Mr. Ed Ward
Town of Chester
203 Middlesex Avenue
PO Box 218
Chester, CT 06412-0218

RE: Addendum to Draft Chester Wastewater Planning Study Report – April 2004

Dear Mr. Ward:

This letter is hereby submitted as an addendum to the draft *Chester Wastewater Planning Study* dated April 2004, and should be inserted into the document and hereinafter be considered as incorporated into the text.

BASIS FOR ADDENDUM

Background

The draft *Chester Wastewater Planning Study* report and the recommended plan presented therein (**see Figure 1**) was approved by the Chester WPCA at the April 2004 WPCA meeting for submittal to the Connecticut Department of Environmental Protection. As presented in the report, the project cost was distributed over approximately 180 users, without any portion of the debt service being allocated to the general tax base. During the April 2004 WPCA meeting the public reacted unfavorably to this arrangement, and voiced a need to move a portion of the project costs to the general tax base.

The WPCA at that time was composed of the Board of Selectmen and one other citizen. In August 2004, a new board was created that was separate from the Board of Selectmen. The First Selectman continued to advise the board to provide continuity and general guidance.

The new board expressed a need to become familiar with the wastewater disposal project background and recommendations, as well as the funding and financing choices available. They were also faced with the chronic hydraulic and treatment issues at the Maple Street subsurface disposal system. As an interim measure, a retrofitted system was installed by a vendor utilizing a blower to add oxygen to the leaching field downstream of the septic tank. This pilot was commissioned in September 2004, and was operated until August 2005.

Over the eight month period from August 2004 to April 2005, the new WPCA became familiar with the tasks performed during the Facility Planning study, and also explored

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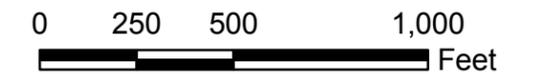
CHESTER WASTEWATER PLANNING STUDY

TOWN OF CHESTER

-  Property Boundaries
 -  Buildings (Within Recommended SSA)
 -  Water
- Sewers**
-  Existing Gravity
 -  Proposed Gravity
 -  Proposed Force Main
 -  Proposed Low Pressure
 -  Proposed Grinder Pumps
- Wastewater Management Plan**
-  Existing Sewer Service Area
 -  Recommended Sewer Service Area
 -  Non-Sewered Area (On-Site Wastewater Disposal)

NOTES:

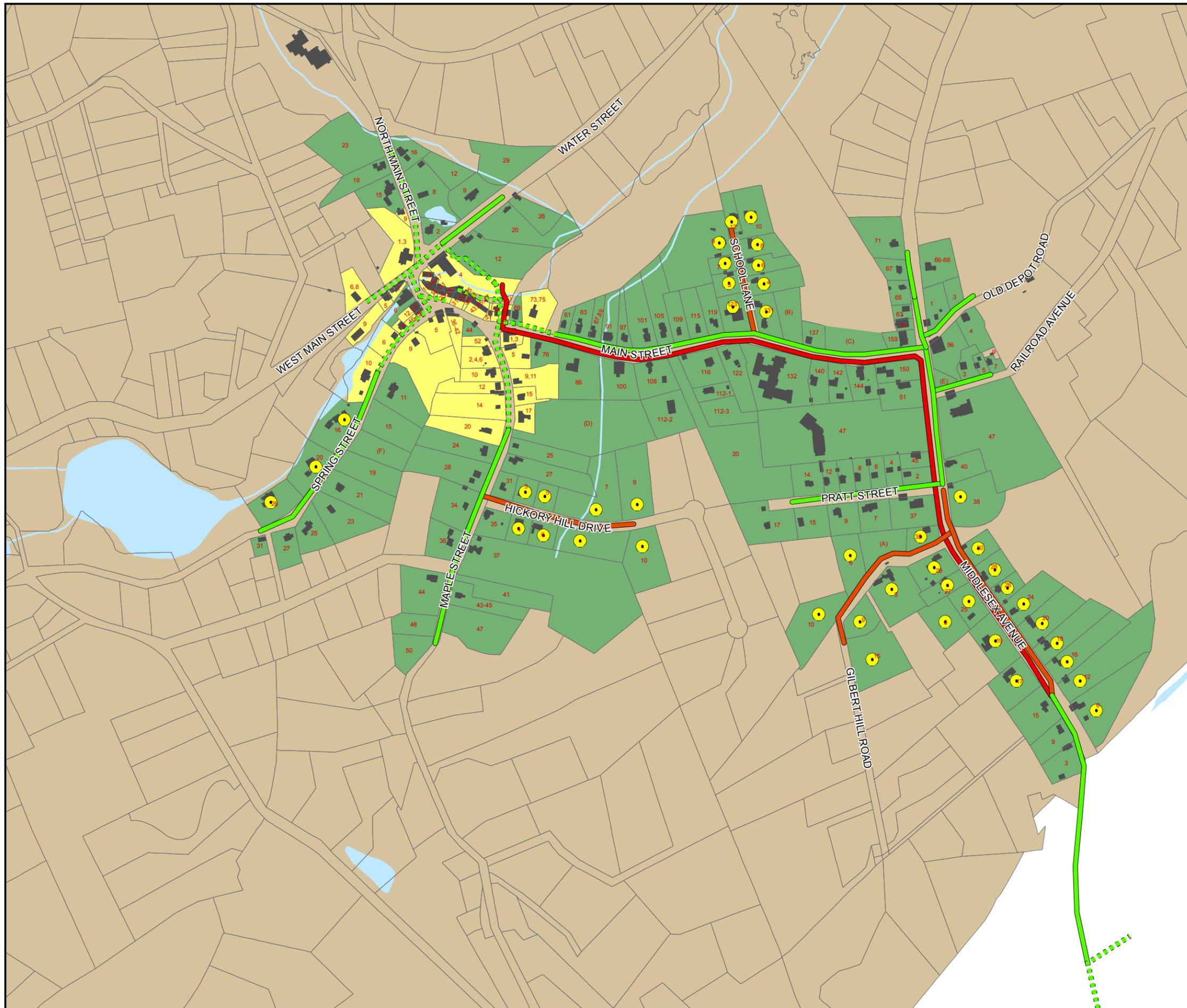
- 1) Recommended Sewer Service Area to include all existing Sewer Service Area parcels.
- 2) Townwide parcel base received from Tighe & Bond on 04/26/2005.
- 3) Existing Sewer Service Area from "Contract No. 2: Construction of Sewage Collection and Treatment System" created by Hewitt Engineers on 04/01/82.
- 4) Existing Sewer Service Area verified April 2005 with the 2003-2004 Sewer Usage Fees and Addresses report, First Selectman's Office, and Town Engineer.
- 5) Data of open water bodies downloaded from the CT Department of Environmental Protection GIS website.
- 6) Building locations (shown within the Recommended Sewer Service Area) imported from April 2001 40-scale aerial survey for the Chester Wastewater Facilities Plan.



MAY 2005
FIGURE 1



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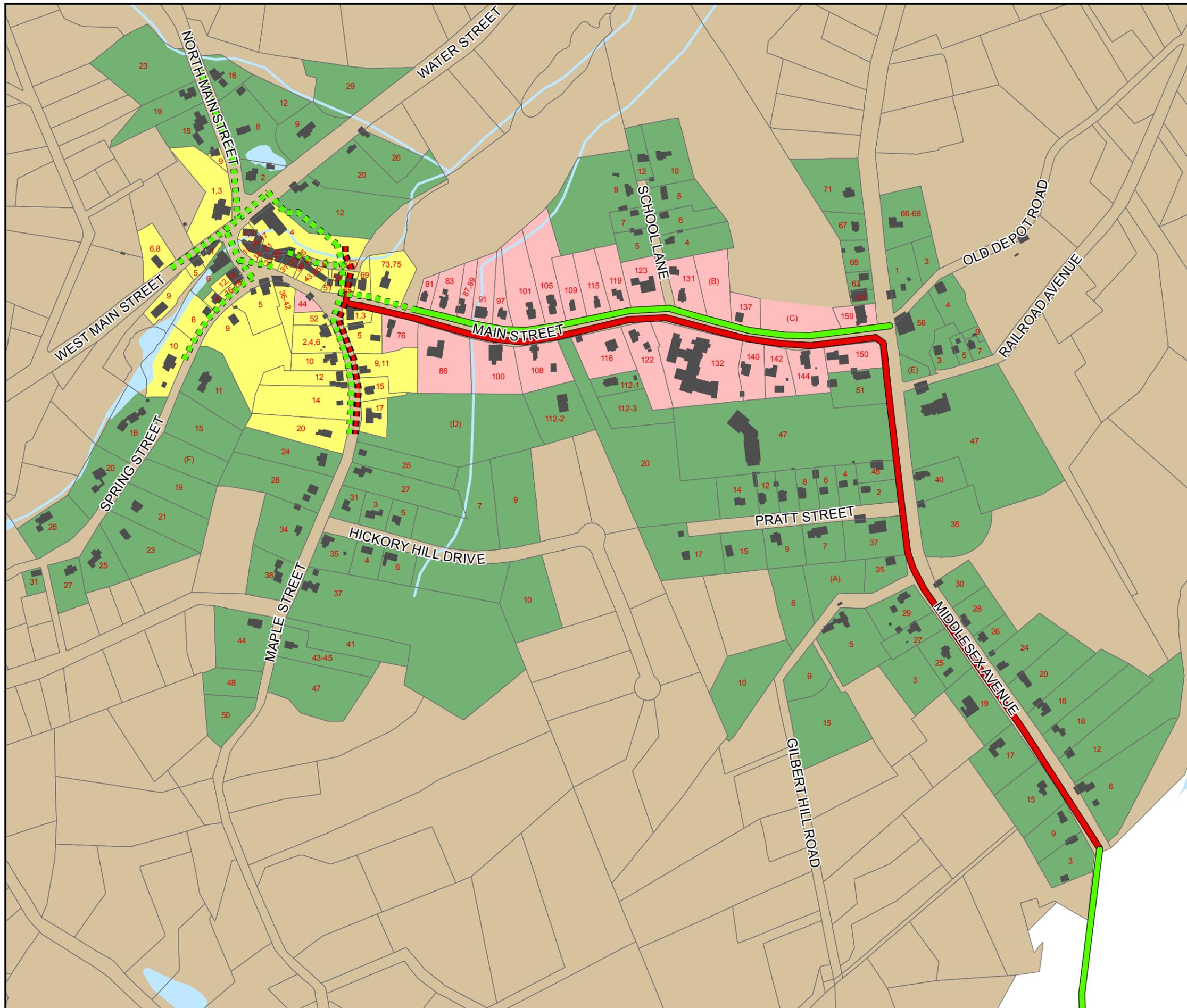
many variations in apportioning the project costs to the users and the Town's general tax base.

The WPCA subsequently modified the recommended plan slightly and adopted the report in April 2005. A public hearing on the report recommendations including the sewer service area, hereafter described as the "Green Zone" was held in May 2005. (See Attached **Figure 1** for the recommended plan and Green Zone from April 2005) At the public hearing, several residents spoke out against the financial burden that would be placed on property owners within the Green Zone. In response to this input, the WPCA adopted a phased approach to addressing the wastewater disposal needs defined in the planning study.

ADDENDUM TO DRAFT WASTEWATER PLANNING STUDY DOCUMENT

In the interest of reducing the immediate cost burden on residents within the Green Zone, yet providing wastewater disposal facilities for chronic problem areas and a mechanism to protect the waters of the State, a phased system to the sewer service area was created. This phased approach was adopted by the WPCA in June 2006. The Phase I area is presented in **Figure 2**. The Phase I improvements will serve to address the outstanding concerns of the Consent Order #WC4977 while providing public sewer service to the identified wastewater needs on Main Street. Future phases of public sewers are not mandated, but may be ordered by the WPCA. No other sewer extension projects within the "Green Zone" are proposed at this time.

Subsequent to the development of the phased approach concept, Fuss & O'Neill, under direction of the WPCA and with the support of the citizen's action group, conducted an evaluation of another potential viable community site for Chester's wastewater disposal within the Phase I area. This evaluation compared the cost and benefits over the twenty year planning horizon of the subsurface disposal system alternative to the Deep River public sewer connection. This study, entitled *Screening Analysis for Chester Fairgrounds SSDS Alternative* was completed in September 2006. Though the evaluation results of the alternative site at the Chester Fairgrounds off Route 154 justified further investigation as a suitable site for a long-term community wastewater disposal solution subject to nitrogen pretreatment (based on extremely limited field investigation consisting of five deep test pits), the Deep River public sewer connection was clearly favorable due to significant cost advantages. In addition, liability issues related to sludge handling and disposal, and potential pollution of the site groundwater are avoided by the public sewer alternative. The WPCA voted to begin design of the Phase I public sewer connection to Deep River, as presented in **Figure 3**, at their September 2006 monthly meeting.



PHASE I SEWER SERVICE AREA TOWN OF CHESTER

- Property Boundaries
- Buildings *(Within Recommended SSA)*
- Water
- Sewers**
- E-SSWR-FORC
- Existing Gravity
- Proposed Gravity
- Proposed Force Main
- Wastewater Management Plan**
- Sewer Extension Area
- Existing Sewer Service Area
- Recommended Sewer Service Area
- Non-Sewered Area
(On-Site Wastewater Disposal)

- NOTES:
- 1) Recommended Sewer Service Area to include all existing Sewer Service Area parcels.
 - 2) Townwide parcel base received from Tighe & Bond on 04/26/2005.
 - 3) Existing Sewer Service Area from "Contract No. 2: Construction of Sewage Collection and Treatment System" created by Hewitt Engineers on 04/01/82.
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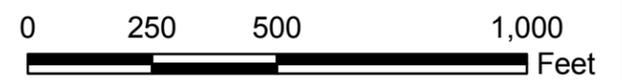
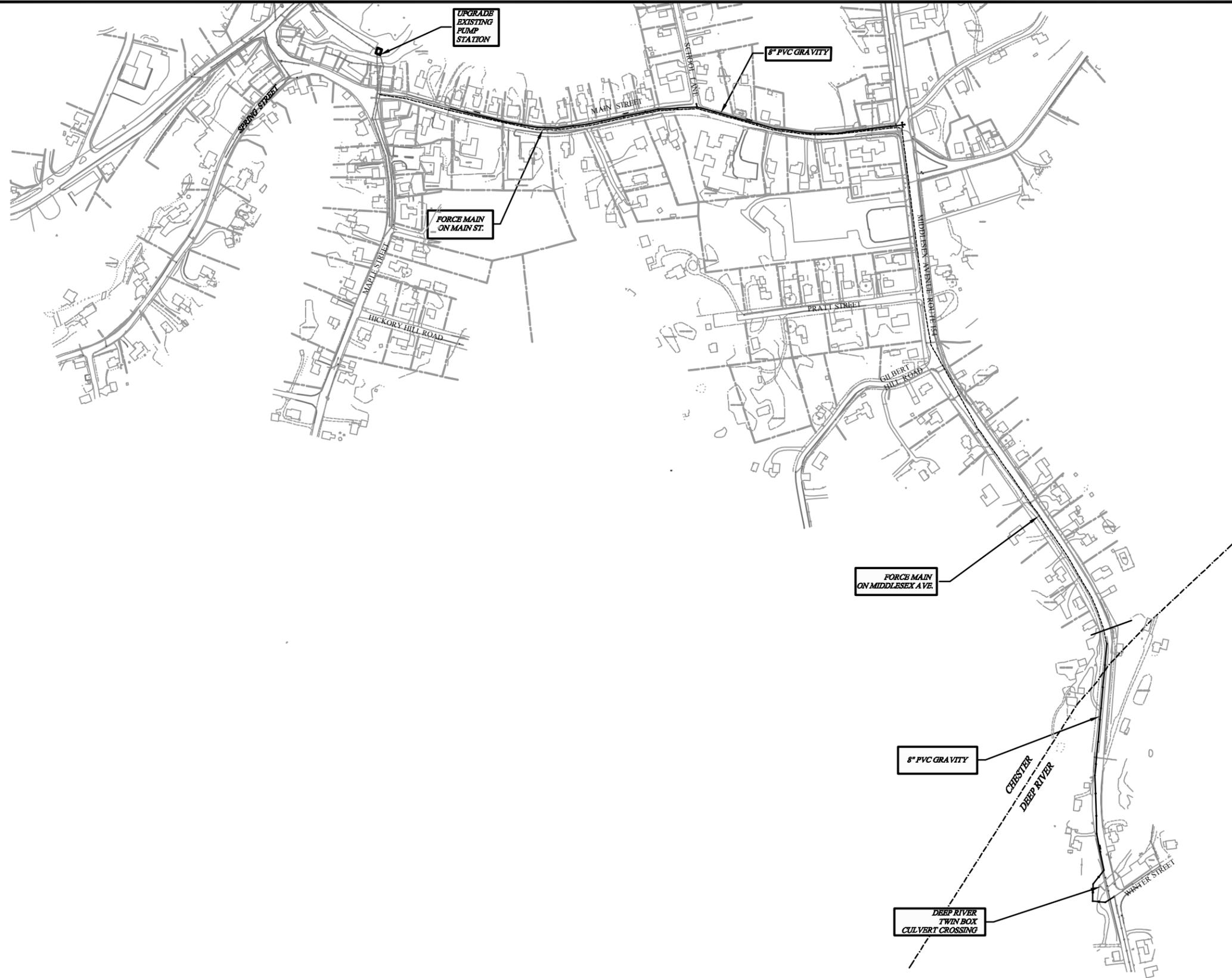


FIGURE 2
AUGUST 2006



FUSS & O'NEILL INC. *Consulting Engineers*
 146 HARTFORD ROAD, MANCHESTER, CONNECTICUT 06040
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No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER		DATE	
CHIEF DESIGNER		DATE	
REVIEWED BY:		DATE	

SCALE:	
HORZ.:	1" = 400'
VERT.:	
DATUM:	
HORZ.:	
VERT.:	
0 200 400	
GRAPHIC SCALE	



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CHESTER WPCA
PHASE I SEWER CONNECTION TO DEEP RIVER
SEWER EXTENSION TO DEEP RIVER

CHESTER

CONNECTICUT

PROJ. No.: 2002523.A20
DATE: JANUARY 2007

FIG-3



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The currently considered Financing Plan (Project Cost Summary) is attached as **Table 1**, and replaces **Table VIII-1** of the Planning Study Report. The Town is anticipating State Clean Water Fund grants and loans to help defray the cost of the project. In addition to the STEAP grant previously secured for planning, the town is also pursuing Federal assistance through USDA as well as additional State of Connecticut STEAP grants.

The implementation plan for the Phase I improvements is attached as **Table 2**, and replaces **Table IX-1** in the draft study report.

By copy of this letter to CTDEP, we are formally requesting expedited approval of our *Chester Wastewater Planning Study* report as addended herein.

Sincerely,
Kurt A. Mailman, P.E.

/lhp

- c: Stacy Pappano – Sanitary Engineer – CTDEP Bureau of Water Management
- Tom Marsh – Chester First Selectman
- Brian Curtis – Nathan L. Jacobsen Assoc.
- Virgil Lloyd – Fuss & O'Neill, Inc.

TABLE 1
Town of Chester
Public Sewer Extension Project to Deep River
PROJECT COST SUMMARY

Item	Cost
1. ENGINEERING AND OTHER SERVICES	
a. Planning & Design	\$ 436,000
b. Construction Services	\$ 162,000
2. LEGAL, ADMINISTRATIVE, EASEMENTS AND SHORT TERM FINANCING	\$ 177,000
3. OPINION OF CONSTRUCTION COST	\$ 1,500,000
4. CONTINGENCY(1)	\$ 225,000
TOTAL OPINION OF PROJECT COST	\$ 2,500,000

NOTES:

1- Contingency estimated at 15% of construction cost

TABLE 2
PROPOSED IMPLEMENTATION SCHEDULE
CHESTER WASTEWATER SEWER EXTENSION PROJECT
February 2007

<u>ITEM</u>	<u>TENTATIVE SCHEDULE</u>
1. Draft Report Addendum to WPCA and DEP	February 2007
2. DEP Review, EIS	February – March 2007
3. Final Report to WPCA and DEP	March 2007
4. Public Hearing	March 2007 & April 2007
5. Design Sewerage Facilities, Create Bid Docs	January 2007 – April 2007
6. Present Project to Town Agencies	Feb. – April 2007
7. Finalize Financing of Local Share	Feb.- April 2007
8. DEP Technical Review	April 2007
9. Referendum	May 2007
10. Bidding	May 2007*
11. Submit Funding Application	June 2007*
12. Obtain CWF Grants/Loans	July - September 2007**
13. Funding Approval by State Bond Commission	September 2007**
14. Begin Construction of Sewerage Facilities	October 2007***
15. Collection System Substantially Complete	Spring 2008***

* Contingent upon Chester town referendum passing for project

** Contingent upon CWF appropriation to project

*** Contingent upon authorization of bond commission to appropriate funding